ABSTRACT

PROCESS FOR THE HYDROFORMYLATION OF AN ETHYLENICALLY UNSATURATED COMPOUND

Process for the hydroformylation of an optionally substituted ethylenically unsaturated compound by reaction thereof with carbon monoxide and hydrogen in the presence of a specific catalyst system which includes a source of Group VIII metal cations; a diphosphine ligand having the general formula (I):

 $X^{1}-R-X^{2} \tag{I}$

wherein \mathbf{X}^1 and \mathbf{X}^2 each independently represent an optionally substituted cyclic group with at least 5 ring atoms, of which one is a phosphorus atom, and R represents a bivalent optionally substituted

bridging group which is connected to each phosphorus atom by a \mbox{sp}^2 hybridized carbon atom; an acid having a $\mbox{pK}_{\mbox{a}}$ <

3; and a source of halide anions.

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